

FIG. 1.—PORPHYRY PULPITS, WITH COLUMNS OF VARIEGATED MARBLES, ST MARK'S, VENICE.

MARBLE.

ROYAL ACADEMY LECTURES 1903.—V.

By Professor AITCHISON, R.A.,

PAST PRESIDENT, ROYAL GOLD MEDALLIST.

I HAVE already given you a lecture on external colour. In certain climates no external colour is more delightful than that produced by the judicious use of marbles; but, in spite of what Charles Garnier said, it is impossible in my opinion to use marble for outside work in London, for it not only rapidly decays in the corrosive atmosphere of London, but gets so smirched with dust and soot that it ceases to be delightful.

I once used some marble externally to give effect to a building, but on passing it after a few years I did not observe that there was any marble on it, the marble being so corroded, so stained by the weather, dust, and soot, that it was not distinguishable from the Portland stone of which the outside was built. When marble is used inside a building, and proper care is taken to have it rubbed up and occasionally repolished, it forms, in my opinion, the most dignified colour; although great care must be taken to harmonise the colours properly; it has, however, this drawback, that we rarely want in England a material that is cold to the touch, and in the misty air of London is mostly damp, even when the mist does not turn into water and run down the marble in tears.

I have before mentioned that the porphyries, and some of the granites, withstand the London atmosphere well. I recollect Sydney Smirke telling me that when he completed the Carlton Club he found that the original granite shafts, which had got smirched with soot and dust, were not in the least corroded by the atmosphere of Pall Mall; for after he had

them sponged down he examined them with a strong magnifying glass, and could not observe any difference between their polish and that of the new ones that had just been put up ten years afterwards; but although granite will take a high polish, grey granite is generally too cold in colour, and the red is not only poorly coloured, but is speckled; therefore, unless you merely want to represent strength, I do not think granite is to be recommended as a coloured material. Green granite looks rather spotty from the crystals in it.

Although people are said to be very wealthy just now, it is doubtful if any private person, however rich he be, would indulge in the costliness of porphyry merely for his own

delight. We know it has been given for portions of Roman Catholic churches by devout and wealthy persons, but that puts its use in the light of an offering to the Almighty, and not as an advertisement of the owner's wealth.

The Roman emperors had a taste for certain classes of marble for some of the more favoured chambers in their palaces, the ophites particularly; Augustus preferred one sort, Tiberius another—they were, I suppose, Egyptian serpentines; but as these palaces perished long ago we have no means of comparing their views of delightful colour with our own. In the Pantheon at Rome the columns are of pavonazzetto and giallo antico, and are used alternately to each niche. The pavement is said to have been designed by the architect of Theodorie the Goth.

As purple porphyry was the imperial colour of the Romans it is possible that many of

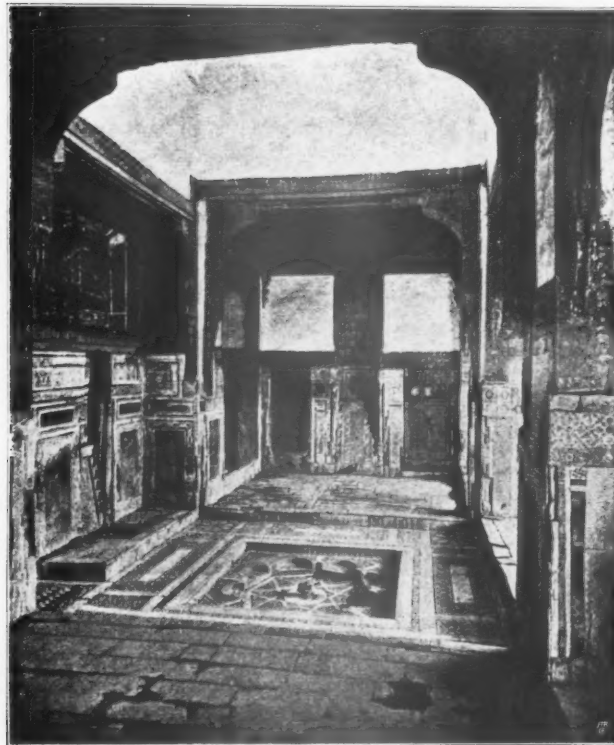


FIG. 2.—A HOUSE IN CAIRO, WITH ANCIENT MARBLE AND PORPHYRY.

the emperors had rooms lined with it; but as far as we know at present the only building that was entirely lined with purple porphyry was the building in the grounds of the palace at Constantinople, where the young princes of the ruling family were born, and hence the saying "born in the purple." There has been much discussion about the colour of the Roman Imperial purple; but we know what it was in the days of Justinian from the mosaics of him and the Empress at San Vitale and other churches at Ravenna. The colour is that of the flower of the auricula.

Although there is some interest in antiquarian researches, my giving you this lecture on marble is not so much to describe what has been done as to give you a little practical advice on the use of marble. There are very few places where it has been used that you

can see in their original glory, though there are still a great many churches and cathedrals abroad where marble has been lavished; but all the best of them have got harmonised by time, and this is particularly the case with St. Mark's and Santa Sofia. I have often thought that if we could have seen St. Mark's when it was just completed in its present form, it is doubtful if we should consider its effect so harmonious as it is now, but barbarously discordant. I once was at San Vitale at Ravenna when some of the plinths of the columns had just been renewed with new red and white streaked rosso antico, in which large masses of red and white were in conjunction, reminding us too strongly of the beefsteaks in the butchers' shops with a great allowance of fat, and harmonising, if one may use such a term, most abominably with the old work. As even comparatively cheap marble is too expensive for most people, we cannot say that the modern architect has ever been able to do his best, though he might and ought to have done the best with that which could be afforded.

There is some marble work in the Arab Hall of the late Lord Leighton's house, but he was obliged to use the marbles he could afford; the shafts of the large columns at its entrance were obliged to be of caserta to be afforded at all; and the string, which was to have been a finely coloured specimen of Irish green, turned out on being cut to be mainly grey and white; the marble mason said he picked out the best block he could meet with, but if he had been compelled to

have all the string green it would have cost a thousand pounds. It is necessary, if you want marble in shade to show, to have very strong contrasts, for in the case I have mentioned the Genoa green and Belgian blue are hardly to be distinguished from each other in daylight. There is some marble work round the staircase of Lord Leconfield's mansion at Chesterfield Gardens, but even here the shafts were only of Devonshire marble. The only marble work on a large scale that has been kept up to its original brightness is that used at Versailles, which is mainly of campan vert and campan mélange, and that in some of the churches in Genoa.

The great examples that we have of decoration by means of marble and mosaic are St. Mark's at Venice and Santa Sofia at Constantinople, and both have the finest specimens known plundered from old buildings. The columns of the nave of St. Mark's are believed to

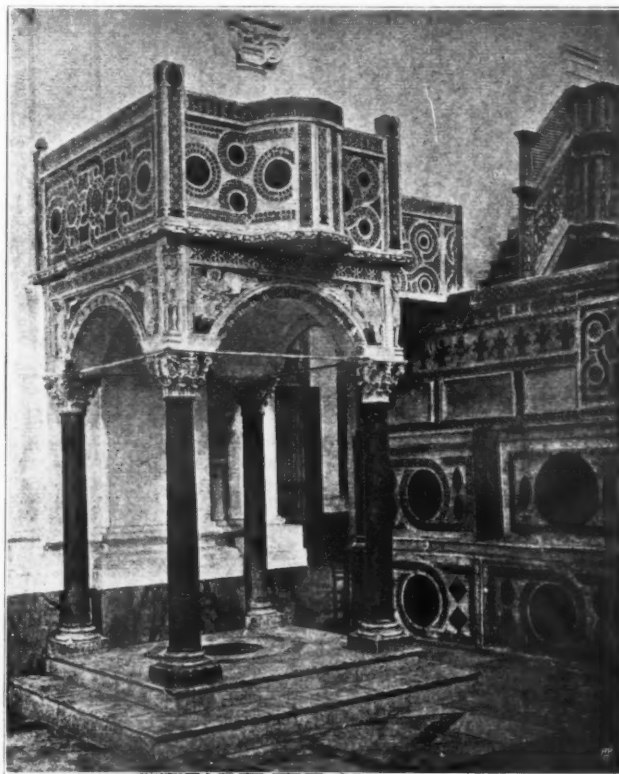


FIG. 3.—PULPIT WITH PORPHYRY WORK AT RAVELLO.

have been plundered from the palace of Mausolus; the whole of the Roman empire was ransacked for the columns and marbles used at Santa Sofia: and as the religion had changed, the emperor was not only reckless about destroying temples for the sake of fine specimens of marble, but the mere desecration of the temples was supposed to bring him a step nearer

Paradise; but, as I said before, any harsh contrasts that once existed have been toned down by the lapse of time, so that they now harmonise well.

When we have an opportunity of using marble largely it should be the aim of the architect, not merely to secure dignity, but to produce permanently lovely effects; for we may be sure of getting a dignified effect by confining our contrasts to white and black. Some of the churches in Venice show us this, as well as the tombs put up in the days of Queen Elizabeth in both the aisles of Henry VII.'s chapel.

The Byzantines were, I think, admirable users of marble. One of the most charming effects I know is that at "the Monastery in the Fields at Constantinople" (*Μονὴ τῆς Χώρας*), of which I think Mr. Barnsley has a coloured sketch.

Thanks to the knowledge and sagacity of Mr. Brindley* and some of the French architects, most of the antique marbles have

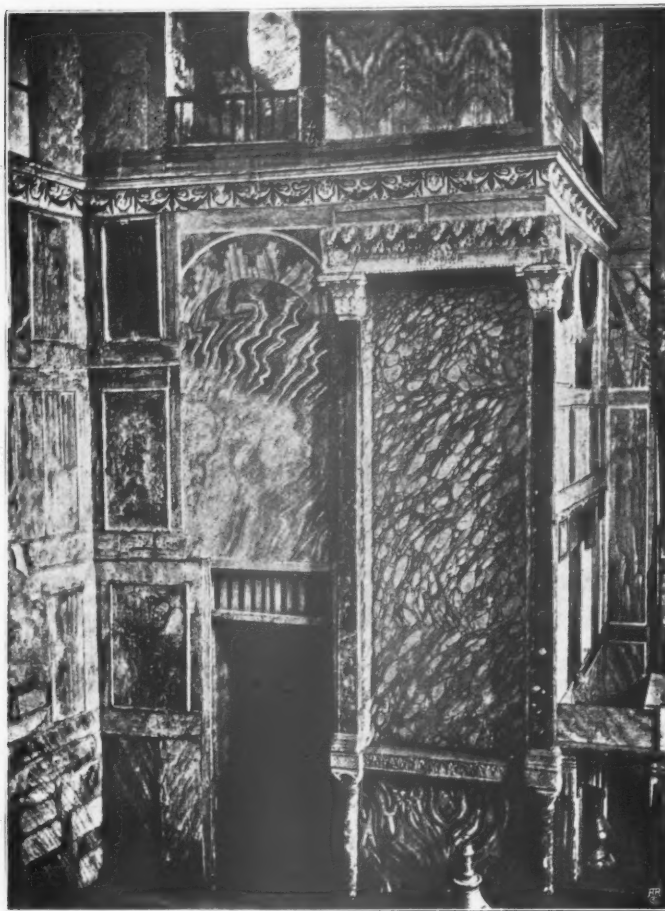


FIG. 4.—ANCIENT MARBLE DECORATION IN A CHURCH (USED AS A MOSQUE) NEAR THE AQUEDUCT OF VALENS, CONSTANTINOPLE.

been bereft of their title "antique." The title "antique" was applied to marbles that came from unknown quarries or from quarries that were supposed to be worked out. Mr. Brindley* discovered the old quarries of pavonazzetto in Phrygia, called by the Roman writers Docimænian from Docimæum, and Synnadic from Synnada, and the verde antique in Thessaly; the French have discovered the giallo antico and many other fine marbles and fine breccias in Algeria and Tunisia. I do not think anyone has yet found the quarry of the breccia of Septimius Bassus, called by the Italians *breccia di Sette Basi*, of which the late W. Burges

* See various Papers by Mr. Wm. Brindley in the Institute TRANSACTIONS and JOURNAL.

had a specimen in his hall. There are splendid specimens of verde antique in the shape of columns at Santa Sofia, but the most beautiful specimen that I have seen was in the possession of the late Mr. Holford at Dorchester House, where it was used as a table top; and our friend Commendatore Boni restored a very beautiful specimen of verde antique in the church at Venice where Othello is buried. When I say restored, he had the shaft repolished, and it now has the effect of a bit of forest at the end of a late spring.

Marble is so beautifully coloured and varied by the hand of nature that it seems impossible to make anything vulgar with it; but you may see some of those pedestals on which busts were put a century or two ago that are almost as vulgar and quite as discordant as the attempts of an ignorant and tasteless person to make agreeable harmonies with colour. I would here remark that, however harsh and discordant colours may be, either in marble or in manufactured things, the colourist will always be able to use them so as to be agreeable to the eye, if the ratio of the coloured piece to its surroundings be in his hands; *e.g.* those abominable satin ribbons of the Stewart plaid can be made quite useful as a sort of centre of attraction where the bulk of the surroundings is very dark or uniform; but it is impossible to give instruction to people who have no eye for colour. The best advice I ever heard given on this subject was by the late Mr. Brett, who was criticising some pictures adversely, and rather severely, and the artist was defended by someone who said that he was very clever in his designs, and his outlines were superb, but he had no eye for colour. Mr. Brett said: "Then he ought to have turned sculptor, because a man who has no eye for colour has no business to be a painter."

Salvi, called Sasso-Ferrato, is, I believe, a very tolerable composer in form and light and shade—I remember admiring a print of one of his pictures in a shop I used to pass—but he is a most abominable colourist, whose pictures set your teeth on edge.

A careful study of colour in flowers and leaves may teach you a good deal. You will see



FIG. 5.—MARBLE MOSAIC DESIGNED BY THE LATE F. P. COCKERELL, AND CARRIED OUT BY MESSRS. BURKE & CO.

that the particular green of the leaf, even in one species when it has different-coloured flowers, is modified in accordance with the colour of the flower; but Nature has so many thousand ways of varying the colour that it is almost impossible to seize on the devices she uses to make all sorts of colours harmonise with different shades of green. Sometimes the texture of the leaf is different from the usual texture of leaves; sometimes the necessary gradation is got by the shades due to different curves; and the contrast between the shapes of the flowers and the shapes of the leaves is a very important element in their harmonious combination, though it is not colour.

Most of the Oriental nations have a love for magnificent harmonies of colour; but I am not sure that some of the most delightful harmonies are not those where the difference between the pattern and the ground is from nearly light to one considerably lighter or darker than the ground. I am not sure that gentle gradations, with here and there strong contrasts of the same tints, are not as beautiful



FIG. 6.—GRAND ANTIQUE FROM THE PYRENEES.

Largely used in the Tomb of Napoleon I., notably the four large twisted columns supporting the baldachino.



FIG. 7.—CAMPAN VERT FROM THE PYRENEES.

as anything. A very beautiful instance of this is in the marble called *fiore di pesca*, or *fleur de pêche*. Where strong contrasts are used, such as between black and white, the beauty depends on the ratio; anything like equality makes it vulgar. What we now call pavonazzetto is generally not the real marble, but merely marble somewhat resembling it. The real pavonazzetto, or synnadic, always has red in the black and grey streaks. One of the Latin poets calls the red the blood of Atys.

There is very little marble work in England, so it is difficult to point out fine examples; and even abroad it is not easy, as almost all the best examples have been brought into tone by age. Perhaps it is one of the things which we most regret, that the palaces of the Cæsars have been destroyed, where cost was no object; and with that capacity for obtaining dignity which the Romans

had we must suppose that some of the effects were very fine. One of the chambers in the Baths of Titus is said to have been wholly paved with lapis lazuli, which suggests to us a most gorgeous and enchanting vision. I do not know whether he has got it still, but Mr. Brindley once had a splendid slab made up of pieces of lapis of different tones and tints.

It always strikes one that the Romans must have got superbly dignified colour effects from the care which some of their best men took to choose marbles which were by no means of great brilliancy. The marble that the great Lucullus picked out, which is still called Lucullean, is said to have been quarried from an island in the Nile; it is a bluish black, perfectly uniform in colour, except that it looks as if dust had been lightly sprinkled over it.

Corsi, who was a Roman barrister, devoted a good part of his life to identifying the different marbles used by the ancient Romans, and published a book on them at Rome in 1845. His magnificent collection of marbles got together from Roman ruins was bought of him by the Duke of Devonshire, and presented by the Duke to the Radcliffe Library, and was eventually taken to the Oxford Museum, where, by the kind offices of the late Sir Henry Acland, I was enabled to see it. Corsi's own slabs, with much smaller specimens let into

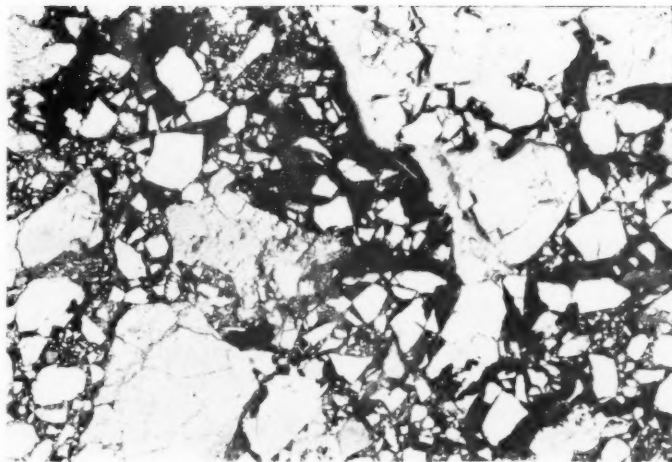


FIG. 8.—BRÈCHE ORIENTALE.

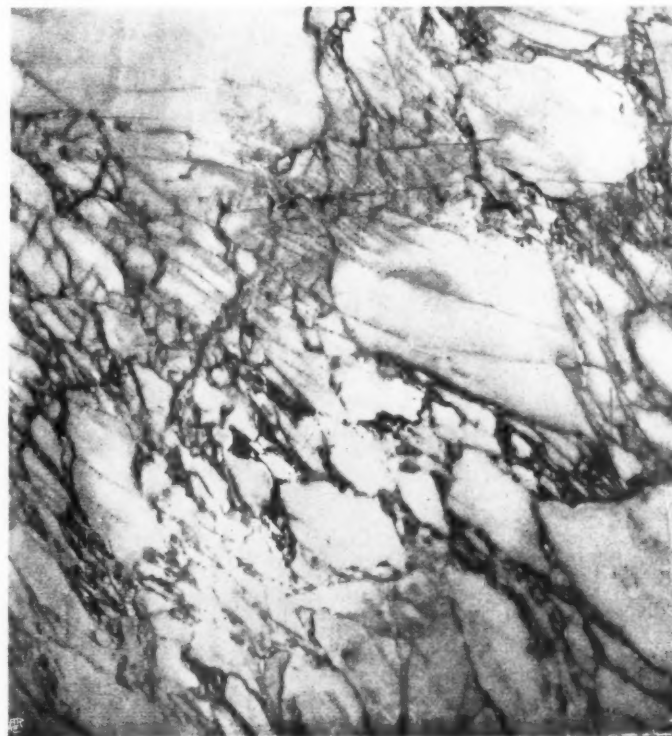


FIG. 9.—SKYROS MARBLE.

white marble, were preserved for many years at the Geological Museum in Jermyn Street, where they may be still, for aught I know. They were two large slabs of white marble, in which the various specimens, about one inch square, were embedded; but unfortunately they were placed in two window-backs, so that the specimens could only be seen by a candle or by having the slabs moved to a proper light.

One thing I did not mention: the architect of the cathedral at Genoa had a beautiful green marble shaft which did not match the height of the others, and he simply lengthened it by adding a foot or eighteen inches of white marble at the bottom, which looks very well.

Perhaps the best place in London I can recommend you to see is the Brompton Oratory, in which there are some very fine specimens of rare marbles, and some of the chapels are

harmonious. The most beautiful thing in it, I think, is the old inlaid altar-piece in the south transept.

The Romans must have rifled every known quarry to get their fine marbles; and that this passion for rare marbles was very great the following remarks will show. There is a marble that is now known as Astrakhan, but geologists who have travelled over that part of the world say that none of that marble which is so named is to be found there, but one that is very like the Astrakhan of antiquity has been found in quarries near Delhi in India; and, if this be true, it must either have been found by a merchant who had gone there, or have been forwarded in the ordinary way of trade to Ceylon, to be brought thence by the Red Sea or the Persian Gulf to the caravan that supplied Rome; and at a



FIG. 10. —DARK CIPOLLINO.*

late time of the Roman Empire some of the enormously wealthy nobles must have thought there was sufficient incentive to buy at most extravagant prices rare marbles to make themselves known. The tax on marble must have formed a considerable asset in the Roman budget, for every marble quarry, I believe, in the Roman empire was set apart for the emperor, and probably a heavy tax was levied on those who could get permission to use the marble. In the late empire the penalty of death without benefit of clergy was incurred by people wearing, even temporarily, a cloak of the imperial dye, so I suppose the use of purple porphyry was prohibited. This, however, might not have been a mere childish vanity on the part of the emperors, but a hint that his post was not so secure as he thought,

* The light cipollino looks something like a cut onion, as may be seen in the columns of the portico of the temple to Antoninus and Faustina in the Roman Forum.

for that some of the great men in remote provinces were ready to raise the standard of revolt. I know there is a case where at a feast the retainers of some great man when they were drunk put an imperial purple cloak on their master, much against his will; but I think it was considered so unpardonable an offence that he was executed.

The greatest display of marbles that we have now is in the popular hotels and restaurants. I could give you a long list of the marbles that we know were used during the time of the Roman empire, most of which have been catalogued by Corsi, but I have had some specimens lent me by Messrs. Burke * and Mr. Brindley to show you some of the beautiful varieties that still exist. It would be a great convenience if some Englishman would re-edit Corsi's book and give a good alphabetical index, for whenever the English begin to build magnificent



FIG. 11.—FLORENTINE PIETRA DURA.

buildings marble will certainly be used inside, if our wealth continues to increase. It is unfortunate that those who have the opportunity of using marble are not always colourists.

I have not said much, but I thought it would be better to give you a short lecture than to fill it up with long lists even of the most beautiful marbles, with the places they come from. I would beg you to observe that even when you see marbles that have not been well assorted it is not always the architect's fault; it may have happened that marble was wanted, but that the funds at his command would not purchase marbles to harmonise properly with each other.

Pliny, in his *Natural History*, under the head of Natural Science, says:

"It now remains for us to speak of stones, or, in other words, the leading folly of the day . . . for everything of which we have previously treated, down to the present book, may by some possibility or other have the appearance of having been created for the sake of man; but as to the mountains, Nature has made those for herself, as a kind of bulwark for keeping together the bowels of the earth;

* The specimens illustrated in Figs. 5 to 12 were kindly lent for the present purpose by Messrs. Burke & Co.

as also for the purpose of curbing the violence of the rivers, of breaking the waves of the sea, and so by opposing to them the very hardest of her materials, putting a check upon those elements which are never at rest. And yet we must hew down these mountains, forsooth, and carry them off; and this for no other reason than to gratify our luxurious inclinations: heights which in former days it was reckoned a miracle even to have crossed! . . . For what utility, or for what so-called pleasure, do mortals make themselves the agents, or, more truly speaking, the victims of such undertakings, except in order that others may take their repose in the midst of variegated stones? just as though, too, the shades of night, which occupy one half of each man's existence, would forbear to curtail these imaginary delights?—Lib. 86, cap. 1.

It is curious to see how the Romans carried even into the empire their original characteristics of ferocious peasants. Cato indulges in diatribes against the use of the bath, and tells us that in his youth people never washed themselves all over except once in ten days, and is very indignant with their using hot baths; and so Pliny, with equal reason, objects to the use of marbles. One of the great ends of civilisation when people have accumulated riches is to know how to spend these riches for the delight of themselves and others, and the Romans very properly, when they became rich, spent large sums on giving the dignified appearance produced by marble to their houses or palaces. We never hear any complaints of the expense of men butchering one another, or of being torn to pieces by wild beasts which had been brought at great expense from Asia and Africa, because this expense was supposed to be useful in keeping up the natural ferocity of the people; but any outlay that was devoted to what we should call refined enjoyment was looked upon as a most culpable extravagance.

The great American novelist Nathaniel Hawthorne was naturally struck by the dignity of marble, as you will see in the following extract from his *Transformation*, but he does not treat it as a poet would who was raised to ecstasy by lovely harmonies of colour.

"This beautiful hall was floored with rich marbles, in artistically arranged figures and compartments. The walls, likewise, were almost entirely cased in marble of various kinds, the prevalent variety being giallo antico, intermixed with verde antique, and others equally precious. The splendour of the giallo antico, however, was what gave character to the saloon; and the large and deep niches, apparently intended for full-length statues, along the walls, were lined with the same costly material. Without visiting Italy, one can have no idea of the beauty and magnificence that are produced by these fittings-up of polished marble. Without such experience, indeed, we do not even know what marble means, in any sense, save as the white limestone of which we carve our mantelpieces. This rich hall of Monte Beni, moreover, was adorned, at its upper end, with two pillars that seemed to consist of Oriental alabaster; and wherever there was a space vacant of precious and variegated marble, it was frescoed with ornaments in arabesque."—Vol. ii. chap. 15, p. 236.

"It is one of the special excellences of such a saloon of polished and richly coloured marble, that decay can never tarnish it. Until the house crumbles down upon it, it shines indestructibly, and with a little dusting looks just as brilliant in its three-hundredth year as the day after the final slab of giallo antico was fitted into the wall. To the sculptor, at this first view of it, it seemed a hall where the sun was magically imprisoned and must always shine."—Vol. ii. chap. 15, p. 238, *The Marble Saloon*.

* * Referring to the illustration on page 514 ["Coloured Terra-cotta," JOURNAL, 26th Sept.] Professor Aitchison desires it to be noted that the tile described as Indian came from India, but the art appears to be Chinese. In a letter on the subject addressed to the Editor, Mr. Matt. Garbutt [A.] says: "Is this an example of the ware made by the Chinese to supply the demand of the East India Company for export to Europe *via* India, or can it be an Indian copy? . . . The green beards referred to in the lecture have, as Professor Aitchison is doubtless aware, their counterparts in modern India, where some men stain their beards a bright brick-red which occasionally, from defects of the dye or from want of further treatment, degenerates into a purple or green tint. Mr. Mortimer Menpes, in his new book on the recent Durbar, speaks of his tonga-driver's beard as dyed magenta to hide the ravages of time."



9, CONDUIT STREET, LONDON, W., 17th Oct. 1903.

CHRONICLE.

The A.A. Building Fund: The Institute's Donation.

At their meeting on the 5th inst. the Council unanimously voted a sum of Five hundred pounds as the donation of the Institute to the building fund of the Architectural Association.

The R.I.B.A. Standard Size of Bricks.

The following standard has been agreed upon between the Institute and the Brick Makers' Association, and has been drafted in consultation with these Bodies and representatives of the Institution of Civil Engineers, and ordered to come into force on 1st May 1904.

The Council recommend that members should insert this standard in their specifications under the title of "The R.I.B.A. Standard Size of Bricks."

1. The length of the brick should be double the width, plus the thickness of one vertical joint.

2. Brickwork should measure four courses of bricks and four joints to a foot.

Joints should be $\frac{1}{4}$ inch thick and an extra $\frac{1}{16}$ making $\frac{5}{16}$ for the bed joints to cover irregularities in the bricks. This gives a standard length of $9\frac{1}{4}$ inches centre to centre of joints.

The bricks, laid dry, to be measured in the following manner:—

A. Eight stretchers laid square end and splay end in contact in a straight line to measure 72 inches.

B. Eight headers laid side to side, frog upwards, in a straight line to measure 35 inches.

C. Eight bricks, the first brick frog downwards and then alternately frog to frog and back to back, to measure $21\frac{1}{2}$ inches.

A margin of one inch less will be allowed as to A, and a half-inch less as to B and C.

This is to apply to all classes of walling bricks, both machine- and hand-made.

For convenience of reference the foregoing

particulars of the standard will appear among the Institute Papers published in the R.I.B.A. KALENDAR.

Competitions: Unsatisfactory Conditions.

The conditions of the following competitions are very unsatisfactory:

1. Shops and Workmen's Dwellings, Kilmar-nock, N.B.
2. Public Library, Coedfrane, Skewen, Glamor-ganshire.
3. Pavilion and Winter Gardens, Bray.
4. Jeffs' Poplar Hydro, Matlock Bank.

It is hoped that no member of the Institute will enter for any of these competitions unless the conditions are considerably modified. Letters have been addressed from the Institute to the respective promoters, and the Secretary will be happy to answer any inquiries of members as to the replies that may have been received.

Congress of Hygiene and Demography, Brussels.

46 Berners Street, W., 25th September 1903.

To the President and Council of the ROYAL INSTITUTE OF BRITISH ARCHITECTS.

GENTLEMEN,—I beg leave to report that, together with Mr. T. W. Cutler, I attended the International Congress of Hygiene and Demography, which was held at Brussels from the 2nd to the 8th September last, under the presidency of M. Beco, Secretary-General of the Department of Agriculture, M. Putyeys being chief secretary. The Congress was opened by H.R.H. Prince Albert, who was accompanied by M. de Favereau, Minister of Foreign Affairs, M. Francette, Minister of Works, and many others. The main questions discussed at the meetings were more of a medical than an architectural nature, the sections being devoted to the following subjects: 1. Bacteriology. 2. The Hygiene of Food. 3. Sanitary Technology. 4. Industrial and Professional Hygiene. 5. The Sanitary Transport of both Human Beings and Animals. 6. Administrative Hygiene. 7. Colonial Hygiene; and 8. Demography. In the sixth section there were some interesting discussions on workmen's dwellings, and it was evident that England is far in advance of other countries in the matter of official superintendence to ensure that these should be constructed and attended to with due regard to sanitation. The delegates were most hospitably received and entertained by their Belgian *confrères*. A reception was held by H.R.H. Prince Albert at the King's palace; a most charming conversation was given by M. de Mot, the Burgomaster, at the Hôtel de Ville; and there were other entertainments, including visits to Antwerp and Spa, where the delegates were the guests of the municipalities. Fortunately the weather was very fine during nearly the whole

time, and this added largely to the pleasure of the visit.—Faithfully yours, JOHN SLATER.

Special Election to Fellowship.

At the meeting of the Council on the 5th inst. the following gentleman was elected to the Fellowship under the proviso to By-law 9, viz.:

ARTHUR SOUTHCOMBE PARKER [A.], *President of the Devon and Exeter Architectural Society*; of 20, George Street, Plymouth.

M. Choisy's Researches.

From PROFESSOR AITCHISON, R.A.—

Our learned and illustrious Corresponding Member, Monsieur Choisy, has just published "The Art of Building amongst the Egyptians," and has shown us how the Egyptians took advantage of the original settlement of their walls in sun-dried bricks to develop a scheme for the stability of all their walls, for these curved lines of wall appear to have been carried out when the facing was of stone, as may be seen at Philæ and Karnak. The crude brick walls were apparently used as staircases for the workmen, and were for this purpose left in steps. One of the great discoveries is that the machine which was taken for the centering of an arch was really a machine for raising stones, not exceeding a ton and a half in weight, to their position, and to this machine M. Choisy has given the name of "the oscillating elevator," a rough account of which is found in Herodotus.

Where the stone walls themselves were insufficient for getting the stones up, separate staircases were built in crude bricks to supply their place, and the ruins of these may still be seen against the Pylon at Karnak. The methods employed for moving stones of enormous weight, such as form colossi and the obelisks, are also shown, and the whole treatise is as interesting as the "Arabian Nights," if the supernatural parts are left out. M. Choisy told me he was going to present one of these books to the Institute. I cannot help thinking that the Institute has been rather niggard to M. Choisy's incomparable discoveries when we consider that his treatises have formed text-books for the whole civilised world. I was once going over the Baths of Caracalla with the celebrated Italian architect, Signor Beltrami, and another Italian gentleman, who began to give us an account of how the vaults had been formed, when Signor Beltrami said, "When we have got Choisy's 'Art of Building amongst the Romans,' it is needless to go over the methods which he has so admirably described."

Rights as to Sewage.

In the present number are published some Addenda and Corrigenda to Mr. Algernon Barker's

valuable Papers on "Rights as to Sewage" which appeared in the JOURNAL two years ago. In sending them Mr. Barker writes: "I hope I may be excused for any defects in previous issues, considering the great difficulty of the subject and the fact that mine was pioneer work in many respects. My task was to give a string of opinions on difficulties which to my knowledge are always arising, but which (luckily for the parties) are kept out of the Courts. The resultant defects were some inaccuracy now corrected, some lengthiness due to a desire for completeness and to the necessity of giving reasons on points not decided by cases, and also some dryness owing to the incorporation of references necessary to the use of these lectures as a *vade mecum*. Decisions subsequent to my lecture on 'Rights as to Sewage,' and also, I must own, mistakes on my own part, have made these addenda absolutely necessary to the usefulness of the lectures, and I think that, though both lengthy and dry, the addenda are at least accurate. I may refer to addendum (2) and to remarks at the end of these addenda." A series of Papers by Mr. Barker on "Duties as to Drains" appeared in the volume of the JOURNAL for 1902.

The late Henry William Brewer [H.A.].

Mr. H. W. Brewer, the gifted architectural artist who passed away on the 7th inst. at the age of sixty-seven, had been an Hon. Associate of the Institute since 1897. He was the son of the late Professor J. Sherrin Brewer, the historian, and was born at Oxford, and educated at Norwich and King's College, London. His art studies were directed by G. C. Stansfeld and William Warren, and he first exhibited at the Royal Academy in 1862. Architects are familiar with his work chiefly through the pages of *The Builder*, which among architectural journals seems to have enjoyed a monopoly of his talents for the past twenty-five years. Describing his work *The Builder* of the 10th inst. says:—

Mr. Brewer's early contributions to our pages were simply illustrative; chiefly drawings of mediæval buildings in Germany, generally selected as rather out of the beaten track of architectural illustration. These he drew on the wood in a most masterly manner (the system of photographing on to the wood had not then come into use); they were noteworthy for the sense of composition and the breadth of light and shade effect which characterised them. . . . These impressions in our old volumes afford fine examples of what could be done with the aid of wood-engraving. . . .

It was almost simultaneously with the introduction in our illustrative pages of lithography that Mr. Brewer seemed to perceive that there was a wider field for an architectural artist in black and white than the mere representation, in however powerful and artistic a manner, of existing monuments. Thenceforth, for our pages at least, he took up one or other of two new lines of illustration; one, the invention of architectural scenes purely with a view to picturesque effect; the other, the restoration in drawing . . . of monuments of the past which had dis-

appeared, but for the reconstruction of which a certain degree of documentary evidence could be found. To the first task he brought genius and imagination; to the second, learning and research. One of the first of his pen-drawings for lithography was one which in picturesque force and poetic feeling he perhaps never surpassed subsequently, the one entitled "Deserted," showing a mediæval city, with its cathedral rising in a heap in the centre of the composition, the houses clustering round and clinging to it, silent and deserted after a visitation of the plague—not an unknown occurrence in the Middle Ages. Among others of his architectural creations were two contrasted compositions entitled "Renaissance Gorgeousness" and "Romanesque Grandeur"; an exceedingly fine picture called "The Ancient Harbour" . . . and a remarkable drawing entitled "Measure and Value," which was not only an architectural composition but a critical protest. . . .

More numerous, however, than his purely imaginative works were his archaeological creations. . . . To this kind of task he brought imagination based on careful research, and he spared no trouble in getting the materials for his restorations. His drawing showing a resuscitation of old St. Peter's at Rome was one of the most remarkable things of the kind ever done. . . . Among other remarkable drawings of this class were those of "London in the Time of Henry VIII.," Paris at the same period (bird's-eye views or panoramas), "Mediæval Oxford" (also a panorama); another panoramic view of "Some English architecture of the past fifty years," done for the Jubilee Number of *The Builder*; Old St. Paul's; Nonsuch Palace; "Old Cheapside"; "Aldgate in 1531," and many others, showing the same remarkable union of archaeological study with picturesque power. We have in our possession the last two drawings of this class which he made, and which still remain to be published: restorations of two quarters of Old Paris.

The old TRANSACTIONS of the Institute has the following papers by Mr. Brewer:—"On the Mediæval Architecture of Central and Southern Germany," TRANS. 1867-68, p. 144; "The Revival of Gothic Architecture in Germany and Holland," TRANS. 1871-72; "On the Churches of Brittany (North Coast)," TRANS. 1872-73, p. 166.

LEGAL REGISTRATION OF ARCHITECTS.

19 Craven Street, Strand, W.C., 1st October 1903.

To the Editor of the JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

SIR,—Before resuming the main subject of my present series of letters to you upon the exposition of the existing "Architects' Bill," I should like to challenge the pessimistic opinion of modern architecture expressed by Mr. Hadfield in the last issue of the JOURNAL, on which he, somewhat inconsequently, bases his objection to the great remedial measure now proposed. To us who live in London, at least, the modern work designed by properly trained architects seems instinct with beauty, original and true, as if we have reached the dawn of a great architectural epoch.

This, however, is beside the point to which

I am immediately devoting myself, and I must apologise for the digression.

The portion of the Architects' Bill which has been most discussed is that which denotes what persons shall be entitled to be registered, and, so far as the first register is concerned, at any rate, there is certainly room for difference of opinion. The object kept in view by the framers of the measure has been to admit to the register all who would be, at the time of the passing of the Bill, accepted by their fellow practitioners as qualified men, as evidenced by their professional membership of any of the leading London and provincial architectural bodies; and of all who had a vested right to be allowed to earn their living by practising architecture, as evidenced by their having done so for nine years, or of having served an aggregate of twelve years as apprentice, assistant, or practitioner, "all or either."

These time tests are rigorous—much more so, if I remember rightly, than they were in the earlier drafts of the Bill—and might act harshly in many cases where it was not allowable for any who had served an apprenticeship of three years before the passing of the measure, or having served less than three years had completed three years after its passing, to claim admission to the register on passing a single qualifying examination. It seemed impossible to deal satisfactorily with those who, while they had been engaged for a considerable period (less than twelve years) in architecture in all capacities, or less than nine years in practice, had never served an apprenticeship, and such have been left, as the Bill now stands, to serve their apprenticeship subsequently to its passing into law. This would be hard upon those who had nearly made up the required time, and the hardness might, I fancy, be obviated to some extent by reducing the period of apprenticeship in such cases to so much as would complete the twelve or nine years respectively.

After the passing of the Bill, the necessary time qualification, precedent to examination, would be either (a) three years as apprentice to a registered practitioner; (b) two years apprenticeship plus five years as an assistant; or (c) ten years as an assistant.

Fees, not excessive, but sufficient to meet working expenses, would be charged on registration of apprenticeship indentures, on admission to the examinations, and on registration as practitioner; and practitioners would also be called upon to pay an annual renewal fee, nominal in amount. This is not imposed as a tax—though it would be right for every member of a profession to contribute towards the expenses of its organisation—but mainly to ensure that each practitioner should communicate annually with the registrar, and so enable him to revise his register, and to omit the names of those who cease to practise and to pay their renewal fees.

In my next letter I hope to deal with a few remaining, and generally less important, points of the Bill.

Yours truly,
G. A. T. MIDDLETON.

ARCHITECTURAL AND TECHNICAL EDUCATION IN THE UNITED STATES, ETC.

By E. W. HUDSON [A.].

HIGHER ARCHITECTURAL EDUCATION.

29 College Road, Reading, 24th September 1903.

To the Editor of the JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

SIR,—In Mr. Hudson's interesting article on "German Technical High Schools in Relation to Construction and Architecture, etc.," in the August number of the JOURNAL, in referring to the proposed new buildings for University College, Reading, he says: "It does not appear, however, that architecture will benefit."

The Architectural and Building Construction classes at University College have been under my charge for the past thirteen years, and I shall be glad, therefore, if you will grant me the privilege of pointing out how the needs of architectural students in Reading and the neighbourhood are being met.

Classes are held at the College in the History of Architecture, Building Construction, Quantities, Mechanics, Surveying and Levelling, Geometry, Perspective, etc., which are attended by over one hundred students, drawn both from architects' offices and from the various workshops in the town and neighbourhood.

Further, I may say that all recent successful Reading candidates in the R.I.B.A. Intermediate and Final Examinations received their architectural education at University College.

It may also be of interest to state that the head of each department at the College was asked, by the architects of the proposed new buildings, to give details of accommodation required, and their requirements have been carefully considered and complied with in almost every detail in the preliminary sketch plans. This accommodation includes a suite of rooms for architectural classes and also a detached block for handicraft classes.

Although the foregoing does not completely satisfy the needs of higher architectural education, the foundation of a school of architecture in Reading cannot long be delayed; and this opinion is confirmed by several local Fellows of the Royal Institute of British Architects.

Yours faithfully,
HARRY HUTT.

MY brief notice of Reading University, England (p. 507, *ante*), has elicited details of what is being done there, and they show considerable activity. The sum of £80,000 is to be spent on new buildings. From sixty to seventy students take the course of Building Construction, and about twenty take Quantities. Architectural students are not numerous, but they get individual attention from the Class Master. Lady students are taking up wood-carving very practically, and doing work for ecclesiastical and collegiate buildings.

Mr. F. H. Wright, Registrar of the Academic Board of Reading University, has favoured me with some notes by Mr. Owen Ridley, the chairman, who has visited some of the American colleges and reported upon their arrangements and methods of work. Mr. Ridley has a keen eye for matters connected with architectural training. He also notes the extreme facility with which money is obtainable in the States for educational purposes. In almost every case it seems that the mere mention of a deficit in income is all that is necessary to secure an immediate and all-sufficient response. Wealthy men, too, are anxious to devote large portions of their fortunes to founding colleges in new districts where towns and settlements spring up and rapidly grow into important centres of industry. Mr. Stanford, a gentleman desiring thus to serve a Western State, asked the President of Harvard what sum he thought necessary for establishing a complete institution, and, being told that ten million dollars would suffice, turned to his wife and said, "I guess we can do that!" And he did it.

Speaking of Chicago University, Mr. Ridley writes: "Finance never causes them anxiety. The deficit of this year will probably exceed a million dollars; but Mr. Rockefeller cleared off nearly as much as that the year preceding."

At Columbia College, New York, fifteen million dollars are now asked for to extend and further endow it.

At Minneapolis money is *lent* for fees, with no other bond for repayment but the student's honour! This reminds one of the reputed honesty of the people when Alfred ruled the land.

Mr. Ridley continues: "There is no difficulty in a good student getting *free education* in a State University. There is no charge for anything in rate schools. Some even provide lunch free. There is less difficulty in getting money from the State for education than for anything else."

How jealous this makes one for one's own

country, and how one regrets the want of earnestness, the inattention, and often the insubordination and hindrance to the minority of good students, caused by the ill-bred majority in our own Evening Continuation schools! Truly may *The Builder* describe it as "winter pastime."

A few extracts about architecture from Mr. Ridley's report are of special interest here. Of Harvard it is said:—

The principal building (after the Great Hall) and the newest, was the School of Architecture, built and furnished and given to the University by a gentleman, whose son had been educated at Harvard and died early, as an acknowledgment of his gratitude. No expense had been spared. A costly building, admirably adapted to its purpose, and furnished with most costly facsimiles of the world's great architectural features, in columns, façade, statuary, sculpture, &c. The drawing rooms were very large, and many students were working with great evident earnestness. Engravings and photos were covering the walls, and immense ranges of drawers holding photos of almost every noted building in the world. Also details of special buildings, &c.

Of Columbia University (New York) Mr. Ridley writes:—

Architectural school very striking; full-size plaster specimens, immense cases of drawers containing photos of all important buildings in the world of which photos are available. Exhibitions on screens of result of "lessons by description." One student describes fully a building, the class make a drawing to scale as to what they consider the describer has portrayed. Exercise in careful and distinct explanation and in concentration of thought on elevation described.

From other sources comes the statement that the invested funds of Harvard amount to over £2,800,000, the income to over £125,000. Total receipts for 1902, £952,000; expenditure £750,000.

With all this munificence displayed for technical and art education, supported and partly controlled by successful speculators like Mr. Rockefeller and Mr. Carnegie, one marvels at the anomalies that present themselves in the cult of the finer instincts of the human race—e.g. Count Tolstoi, himself accused of being generations "behind the times," is denouncing the ways of the heads of these Western colleges as "barbarous," if not actually describing them as "barbarians." A very pretty quarrel, which reminds one of the pronouncement (half a century old) of Don Patricio de la Escosura in his great work, *España artística y monumental*, with which Count Tolstoi apparently agrees. Writing sixty years ago of the effect of civilisation upon art, the former says: "Les arts libéraux, et surtout l'architecture, n'ont rien gagné, ne peuvent rien gagner à l'esprit de la civilisation moderne." And yet the wildest dream of the Spanish dilettante could not have conceived the effect upon design of a high pressure civilisation like that of the United States.

From what I learn from Mr. Wright the interests of architecture at Reading appear to be in good hands in the person of Mr. G. W. Palmer,

M.P.,* and the proposed new buildings will afford better facilities for architectural classes, which is something, though not all that is required for the higher education of students. It is something more to be able to hope for another school of architecture in England, to counteract the regrettable incident of such a departure to foreign shores as the proposed establishment by Mr. Alfred Gilbert, R.A., of a school of painting at Bruges; for though one admits the seductions of that and similar Continental cities, one cannot forget Chester, Coventry, Oxford, Winchester, and Wells. We are told "Bruges is one of the cheapest towns in Europe to live in." Is that inducement enough? Has it come to this? Well, one is thankful for Bushey in our own land, and grateful to Professor Herkomer for not forcing our young artists away to a strange land because living is cheap or art is only to be found abroad.

But, reverting to Reading, when I said—failing response to first inquiry—"it does not appear that architecture will benefit," I had in mind more particularly such a bequest as that of the late M. Jean Roux, who left a million francs to the *École des Beaux-Arts*, to be used for prizes for painters, sculptors, architects and engravers; or, better still, for advancing fees and providing scholarships and exhibitions, for the benefit of poor clever students whose careers are hindered by want of money.

We have no exactly similar institution to the *Société des Architectes Diplômés par le Gouvernement*, though the Institute fulfils some of its functions by awarding medals, prizes, bursaries, travelling studentships, &c., and the Benevolent Society, as far as it is able, gives grants in aid of those who have been unfortunate; but it is the young and struggling student who is not sufficiently provided for, and it should be by governmental care that the want is supplied.

It seems to me that architecture should have exceptional treatment, for it is to a large extent the nation's history in stone, the record for future generations to read even as they run; and if the limit of self-examination has not been passed, and one more comparison be permitted, we must own that this record writing is one of the things they, departmentally at least, manage better in France. The contrast between their method of organising public works and buildings and our own has been ably described by the late Secretary of the Institute, Mr. W. H. White, in his book *Architecture and Public Buildings*.

Another tour of inquiry into American systems—that sent by Mr. Alfred Mosely, C.M.G.—begins on

* Mr. Palmer procured at some trouble and expense a portfolio, from the Maharaja of Jeypore, of over six hundred plates of working drawings of architecture, which can be seen at the College.

3rd October, when British experts start upon a visit to the colleges and schools; and after united inspection of Columbia College, some high and elementary schools, the Educational Alliance, University Settlement Society, the Normal College, Harvard, Yale, and perhaps Washington, the members separate, and individually study the special centres of work whose principles each is best acquainted with. Philadelphia, Chicago, Detroit, Niagara, Ithaca, and Albany, with the Carnegie Museum, will probably be visited. After the report of this deputation is received it will be a good thing if any result arises for the general welfare of English students.

It should not, however, be overlooked that such inquiry is not confined to Great Britain alone. Germans have made most complimentary statements regarding our Board Schools after inspection, and as I have felt bound to notice the waste of time and money in some of the London Board School evening classes, we may—*andire alteram partem*.

Mr. A. Shadwell's letter of 25th August in *The Times* points out how we are accustomed to criticise disparagingly our own work and systems. Referring to some remarks by the Bishop of Hereford, he writes: "English continuation schools command the sincere flattery of imitation in Germany." Dr. Kuypers, the inspector of the compulsory continuation schools at Dusseldorf, visited England for hints in view of their establishment, and he was "full of admiration for them, and expressed his obligation for valuable hints in the organisation of his own, which are to a large extent modelled on the English example."

Mr. Shadwell gives his own opinion in regard to our technical schools:—"So far as the higher education of working men is concerned, they are better schools and far better attended than the corresponding ones in Germany or America." At Blackburn he found sixty lads out of seventy in

the pattern-making class who were working boys and sons of working men, and these boys were at work at 6 a.m. daily in the mills. "The same thing may be seen at Bolton, Oldham, Bradford, Sheffield, and elsewhere. You cannot see it in Germany or America. Our schools have far more working-class students than theirs, and the teaching is excellent. A lad trained at Bradford has been appointed teacher at Roubaix. The most skilled men, beside a host of foremen and managers, in American factories are British."

In the final sentence of this letter, however, there is something to be regretted from the point of view of a desire for perfection in craftsmen, for Mr. Shadwell says: "From the workman's point of view the object of higher education, technical or other, is not to make good workmen but to help them to be something else. I have only met one answer on this head. The schools are 'stepping-stones out of the mill.'"

If, as seems most likely, ceasing to be craftsmen their skill is no longer utilised in a higher position, it is matter for regret. I am afraid the excellence in design that is developed in the manufacturing towns, evidence of which is shown in the exhibitions of work at South Kensington Museum referred to in the previous notes, is not universal, though a few may be picked out for special excellence.

London University on 7th October began its new departure of day classes for the better training of students by Professor Simpson's lecture on the Evolution of Architecture. If parents and employers give the scheme full support, it must be of the greatest benefit to earnest students, and prevent that unfortunate condition of some of the latter which is described by Murger in the lines:

Just as a gipsy wanderer
 Roams at his own sweet will,
 So I on the highway of Art
 Am aimlessly wandering still.

RIGHTS AS TO SEWAGE.*

By ALGERNON BARKER, Barrister-at-Law (Newcastle-on-Tyne).

Journal, Vol. VIII. (1901), 8th June, p. 369; 27th July, p. 442; 31st August, p. 469.

ADDENDA AND CORRIGENDA.†

JOURNAL, 8TH JUNE 1901.

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- 1.‡ Col. i., end of 3rd par., after “(b)” add: “Your rain-pipe, as well as your foul drain, can empty into the sewer. *Hammersmith v. Ainsworth*, 62 J.P. 103.”
2. Col. i., after footnote add: “These lectures are not intended to be simple summaries of the law, but deal with most of the difficulties which may arise. For this reason they raise numerous points not covered by legal decisions, but which crop up at every turn. Such points not being covered by decisions, I have found it necessary to give the reasons for my opinions, so that the legal adviser may judge of their value.”
3. Col. ii., after end of par. headed “**Sea and Tidal River**” add: “See Addenda of 1901, on p. 475, as to this page and the last addendum (on River and Sea Fisheries) on p. 476.”
4. Col. ii., in middle of par. on Sewage Watercourse, after “. . . Prevention Act of its sting” add: “In any case river pollution is not legally criminal. *Derbyshire C.C. v. Derby*, 60 J.P. 854; 63 J.P. 195, 701. Private owners (even of artificial streams—see *Roberts v. Richards*, 51 L.J., Ch. 297; *Wood v. Waud*; *Rameshur v. Koonj*, 4 Ap. C. 121) might object and sue you for nuisance (see ‘Duties as to Drains’).”
5. Col. ii., put commas after “**Field**” and “**Ditch**” in heading to the last par.

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6. Col. i., 3rd par. (which begins “whithersoever”) after “(f)” add: “*J. G. v. Kingston*, 34 L.J., Ch. 481; 12 L.T. 665; 11 Jur. [N.S.] 596, and see Nuisances in lecture on ‘Duties as to Drains,’ September and October 1902. If you have a cesspool take care that its overflow does not violate P.H.A., 1875, section 47 (3). I suppose you pump or dip sewage out of it for manuring purposes.”
7. Col. i., before par. headed “**Home Sewers**” insert a paragraph thus: “**Private Sewers.** Then,

* See also “Duties as to Drains,” in the August, September, and October numbers, 1902.

† Note.—Max. = Maxwell’s *Interpretation of Statutes*, latest edition.

Fitz. = Fitzgerald.

P.H.A. = *Public Health Act of 1875*, and, when a section is quoted without naming the statute, imply P.H.A.

‡ See the last par., p. 556, col. ii., as to purpose of these numbers.

again, there may be private sewers belonging, not to an authority, but to some other person. Instance a pipe to a sewage farm. If the owner gives you a license to use one, well and good. If not, you may still do so under sections 23 and/or 25, if *your own* authority are ‘entitled to use’ it, and if also your site is within 100 feet of it, for by these sections (if *applying to your case*, as to which see lecture on ‘Duties as to Drains’) you must, and therefore can, empty into it. (Contra *Ballard*, 51 J.P. 135).

“In such a case I cannot see that you are bound by any rules, except to act reasonably, to observe the conditions imposed upon the authority under whom you claim the right, and to obey sections 23 and/or 25.”

If a sewer belonging to the authority is also within the 100 feet, you may not be able to use the private sewer, *malgré* owner, since you need not (see “Duties as to Drains”).

As to property intervening between you and this sewer. You could not overbear the owners (other than the local authority), as the sewer would not be an “available sewer.” (See lecture “Duties as to Drains” (and note) as to 100-foot rule, “Destination.” Also see *Wallen v. Lister*, 1894, 1 Q.B. 312. Also defence (4), par. 121, lecture on “Duties as to Drains.”

Note that if you are under sections 23 or 25 (see “Duties as to Drains”) you may be ordered to empty elsewhere than into a sewer.

8. Col. ii., in par. 2 (middle) for “severing” read “dividing.”
9. Col. ii., in last par. *Croft v. Rickmansworth* = 39 Ch. D. 272, and in the same par., continued on p. 372, *Jones v. Conway* = 1893, 3 Ch. 603, and refer to Max. 238 a.

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Col. i., and at end of par., before “so much for the article” add: “Even if such drains are not under the definition (section 4), they may still be under section 21, as definition clauses are not exhaustive. Lumley does not deny this.”

10. Col. i., in last par., after “to all persons interested” (i) add: “Max. 125 b.”
11. Col. ii., 3rd par. should read: “Sewers fall into three classes—(clean) water sewers, slop-water sewers, and faecal sewers.”
12. Col. ii., 4th par. (headed “**Water Sewer**”), after “curtilage question” add: “dealt with later.”
13. Col. ii., same par., after “suppositious case” add: “of a sewer to irrigate land.”

14. Col. ii., same par., add these references to all cases: *Ferrand v. Hallas*, 1893, 2 Q.B. 135; *Russell v. Knight*, 16 M.C.C. 249; *Times*, 9th May 1894; *Durrant v. Branksome*, 1897, 2 Ch. 291; *Croysdale v. Sunbury*, 1898, 2 Ch. 515; *Kinson v. Poole*, 1899, 2 Q.B. 41; *Sykes v. Sowerby*, 1900, 1 Q.B. 589.
15. Col. ii., same par. (middle), after "beneath from floods" add: "Held that such drains, if sewers, were own profit sewers, because they were clean and also made by private individuals (see pp. 589, 592, and 595 of the last-mentioned case)."
16. Col. ii., same par. (7th line from bottom of par.), after "*Durrant v. Branksome*, 1897" add: "2 Ch. see p. 301, line 25."
17. Col. ii., same par., after "genuine sewage" add: "Horse-droppings not considered, *ibid.* 297)."
18. Col. ii., same par., at end, as to water sewers, add: "Of course such sewers if made by the local authority—e.g. to drain their parks—are sewers, and also are vested in them; but on grounds of convenience neither slops nor faecal sewage, nor even rain-water can be drained into these (see addendum 73 to note (b))."
19. Col. ii., last par., headed "**Sanitary Sewer**," delete as far as "no distinction" on the next page, and instead read: "**Slop-sewers and Faecal Sewers**" (see (b) as revised). We now come to two subdivisions of foul sewers. Into a slop-sewer you can pour slops, and into a faecal sewer you can pour faeces. This is the sole distinction between them. A sewer only occasionally fouled with slops is a clean sewer, and only occasional faecal pollution would not turn a clean or a slop-sewer into a faecal sewer (*Brown v. Dunstable*, 1899, 2 Ch. 578; *Durrant v. Branksome*, 1897, 2 Ch. 291, at p. 297 as to horse-droppings).

Mark this, however, that even if the slops or faeces, as the case may be, come from one set of premises only, and if, at the same time, some drainage (including in that term roof-water, but not field or garden water) comes from another set of premises, then the conduit is a foul sewer (slop or faecal, as the case may be). *Holland v. Lazarus*, 66 L.J. Q.B. 285.

But there must be foulness from one source at least, or the double roof-water conduit, if not made or bought by the authority, would be an "own profit" sewer, and therefore not vest in them, for no one can pretend that these gutters are made for "sanitary or ordinary sewage purposes." (These words are used in *Sykes v. Sowerby*, q.v. 1900, 1 Q.B. p. 590, ll. 6 and 7; p. 591, l. 19; p. 592, par. 2). If this is not true, then the owner could force the authority to repair his gutters, because he allowed his neighbour to draw roof-water on to them! Double roof-water sewers, then, do not vest in the authority.

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20. Col. i., line 20, after "sewer" at the end of the par. which begins "As to its source" add: "In my lecture on 'Duties as to Drains,' 'House, Part of, or not,' I deal with the question as to whether premises are one or many; but it must be remembered (see that lecture, 30th August 1902, p. 473, col. i., middle), that, on the authority of *Hedley v. Webb*, 1901, 2 Ch. 127, we are bound to hold

that though premises may be two houses, they may be one building; and so might a structure which was occupied by one or more families, whether in flats or not. The judge was dealing with the meaning of the word 'sewer,' so that the case is well in point in that respect. He distinguishes *Kershaw v. Taylor*. An earlier case, *Grant v. Langston*, 1900, A.C., 383, seems to make the same distinction between one building and one house. Burglary cases are not in point as to the question now discussed.

"The great object is to see on what principle the Courts would hold buildings and premises to be one or many. According to Lumley the purpose of the P.H.A. in vesting double sewage conduits was, where there was a conduit which was fouled by two householders, to obviate the disputes as to who should clean and repair, and the consequent neglect, since 'anybody's business is nobody's business,' and so they vested it in a third party—viz. the authority. I grant that the decision in *Hedley v. Webb* is dead against such a principle, but I may rely on the Arcade case (*St. Martin's v. Bird*, 1895, 1 Q.B. 428), and therefore venture to treat *Hedley v. Webb* as only to be applied to a set of circumstances analogous to it in every detail.

"As to the whole matter see 'House, Part of, or not,' 30th August 1902, lecture as to 'Duties as to Drains' except 'Division by Floors,' which does not apply (especially see note (h) *ibid.*, remembering *Hedley v. Webb*).

21. Col. i., 3rd par. from bottom, after "division between" add: "See lecture as to 'Duties as to Drains,' note (g), p. 475."
22. Col. i., last par., *Doe v. Collins* is 3 T.R. 498.
23. Col. ii., line 8, after "East" add: "Vol. ii., Ch. 15, section 10, and see Glen on the London Building Act, 1894, ed. 1895, p. 67."
24. Col. ii., par. 2, beginning, after "Lands Clauses Acts" add: "All the relevant cases on the subject, with diagram, are given in lecture on 'Duties as to Drains.'"
25. Col. ii., four lines further down, after "buy up part of a house" add: "N.B. Cases under Michelangelo Taylor's Act are not much used, e.g. *Gordon v. St. M.L.K.*, 1894, 2 Q.B. 742, 750; *Gibbon v. Paddington*, 1900, 2 Ch. 794."
26. Col. ii., after "Marson's case" add: "6 Eq. 51."
27. Col. ii., after "Lord Grosvenor's case" add: "26 L.J. Ch. 731."
28. Col. ii., after "Steele's case" add: "*Steele v. M.R.*, L.R. 1 Ch. 275."

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29. Col. i., line 2, after "licence" add: "*Asquith v. Griffin*, 48 J.P. 724."
30. Col. i., at end of same par. add: "See also a case on Improvements rates (*Hole v. Milton*, 31 J.P. 804), described fully in lecture on 'Duties as to Drains,' note (k), 30th August 1902, p. 476."
31. Col. i., next par., at beginning, after "Pilbrow" add: "*Pilbrow v. St. Leonard's, Shoreditch*, 1895, 1 Q.B. 33."
32. Col. i., next par., at beginning, after "St. Martin's" add: "*St. Martin v. Bird*, 1895, 1 Q.B. 13, 428."

33. Col. ii., last par. but two, end, after "two or one" *add*:
"Refer to lecture on 'Duties as to Drains,'
'House Part of, or not,' and notes (g) and (h)
thereon."

34. Col. ii., last par. but one, beginning, after "ring fence"
add: "(see 'Duties as to Drains,' (h), (a))."

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35. Col. i., at top of page, after "large" *add*: "See *Hole v. Milten*. Lecture on 'Duties as to Drains,' note (k)."
36. Col. i., at end of 3rd par., as to "private communication," *add*: "but see *Hedley v. Webb* and 'Duties as to Drains,' (h, β)."
37. Col. i., next par., after "the necessity" *add*: "(see 'Duties as to Drains,' (h), (γ))."
38. Col. i., same par., after "*Doc v. Collins*" *add*: "3 T.R. 498. As to value of conveyancing cases as to meaning of 'sewer,' see the *Shoreditch* case as quoted above."
39. Col. ii., last par. but one, middle, after "Harvie's case" *add*: "*Harvie v. S.D.L.*, 32 L.T. 1."
40. Col. ii., last par. but one, middle, after "*Greenwich Railway Case*" *add*: "*R. v. L. & G.R.*, 2 G. & D. 447."
41. Col. ii., last par. but one, middle, after "private communication" *add*: "(but see *Hedley v. Webb* where applicable)."

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42. Col. i., line 6, after "Arcade" *add*: "(but see *Hedley v. Webb* as to semi-detached villas)."
43. Col. i., end of par., *add*: "Nor will a description in a conveyance unite or sever. *Kerford v. Sencombe*, 57 L.J. Ch. 270, at 275, middle."
44. Col. i., middle of column, after "hands across the sea" *add*: "See *Sparrow v. Orford*, 21 L.J. Ch. 731. 'Duties as to Drains,' note (g)."
45. Col. i., six lines below, after "enough to unite them" *add*: "Contra, perhaps, see voting cases (but distinguishable), e.g. *Boon v. Howard*, and see 'Duties as to Drains,' note (i)."
46. Col. i., end of same par., after "My pipe becomes a sewer" *add* a new paragraph as set out at top, p. 476 of Addendum for 1901, and then *add* a new paragraph: "As to a drain from sewage works, see *Tottenham* case, 78 L.T. N.S. 470."
47. Col. i., bottom line, after "Cowes" *add*: "1892, 3 Ch. 18."
48. Col. ii., line 2, after "several" *add*: "of *Meaders*."
49. Col. ii., line 3, after "passed" *add*: "still."
50. Col. ii., end of par., after "Norwich" *add*: "27 L.J. Ch. 742."
51. Col. ii., 12 lines from bottom, after "*Wheatcroft's* case" *add*: "52 L.T. 356."
52. Col. ii., 4 lines below, after "*Sutton's* case" *add*: "27 L.J. Ch. 742."
53. Col. ii., 4 lines below, after "Ainley" *add*: "1892, 2 Q.B. 274."
54. Col. ii., 2 lines lower, after "*Fordam's* case" *add*: "1894, 2 Q.B. 780."
55. Col. ii., next line, after "local case" *add*: "(*Newcastle-on-Tyne v. Houseman*, 63 J.P. 85)."

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56. Col. i., 5 lines from bottom, after "make it one" *add*: "*L.N.W.R.C. v. Runcorn*, *ubi supra*, but see note (b). They must intend it to be a slop or faecal sewer, if slops and faeces respectively are to be allowed to foul it."
57. Col. i., 3 lines from bottom, after "Utley" *add*: "1894, 1 Q.B. 233."
58. Col. i., 2 lines from bottom, after "does not matter" *add*: "Even if the sewer is under our drawing-room, it will belong to the local authority. A sewer in private land would often be found where a neighbour has an easement for drainage. Again, even if the sewer consists only of the drainage of two detached cottages in the heart of a lonely moor, it will vest in their authority."
59. Col. ii., top of page after "blessed by sanction," *delete* "No . . . his sewage into it," and instead *read*: "Well, even though section 21 was contravened and the authority were unaware of the sewerisation, the thing would be a sewer and vest so far as an innocent person (not claiming under the infringer) or the authority was concerned, *Lazarus v. Holland*, 1900, 66 L.J., Q.B. at p. 286; *R. v. St. Matthews*, B.G., 1896, 2 Q.B. 319; *L. N. W. R. Co. v. Runcorn*, 1898, 1 Ch. p. 44, bottom, *obiter*; *Kershaw v. Taylor*, 1895, 2 Q.B. 473; *Geen v. Newington*, 1898, 2 Q.B. 1 (don't confuse the other question in this last case as to sanction for combined drainage with the question of illegality. The fifth drain in that case only affects us); *Bateman v. Poplar*, 1887, 37 Ch. D. 272, is overruled so far as it contradicts this. But the first wrongdoer, and all persons claiming under him, except perhaps innocent purchasers, would be 'estopped,' i.e. prevented from pleading that he had sewerised it—*Florence v. Paddington* (1895, 12 T.L.R., 30)—since he had done so without the local authority's sanction. So if in a court of law he was the person who desired to dub it a vested sewer, his mouth would be stopped."
60. Col. ii., line 7, after (r), *delete* "even so far . . . second house," and instead *read*: ". So far as to the authority's sanction, but what as to private owners? Can their drain be sewerised without their consent? *The trespasser* cannot plead that it is a sewer unless he can get a subsequent assent or tacit acquiescence from the owner of the drain. *Hedley v. Webb*, 1901, 2 Ch. 126; *Meaders v. West Coates*, 1892, 3 Ch. 18. When, however, this is given, the drain immediately vests, provided that double sewage runs for a while after the consent. But a person not claiming under the trespasser, and also an authority, can affirm conduits which were sewerised by trespass to be sewers. In both cases it is a question of estoppel, i.e. of truths a man is forbidden to plead."
61. Col. ii., 2nd par., near end, after "two premises" *add*: "or by one, if another passes rain-water from the roof."
62. Col. ii., 3rd par., end, after "house sewage" *add*: "nor can you turn faeces into a slop-drain. Sewer includes the whole apparatus, *Poplar v. K.*, 28 L.J., M.C. 37, but not for section 16, a pumping station, *King's College v. Uxbridge*, 85 L.T. 303."
- Next par., middle, after "vest" *add*: "(see *Max*, 435 d, 'vest')."

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63. Col. i., top, after "Bonella's" add: "18 Q.B.D. 383."
 64. Col. i., after "Acton Local Board," add: "28 Ch. D. 283; and *Pinnock v. Waterworth*, 3 T.L.R. 563."
 65. Col. i., 2nd par., top, after "Hallas" add: "1893, 2 Q.B. 135."
 66. Col. i., 2nd par., end, after "Act" add: "(Max. 283b)."
 67. Col. i., two lines lower, after "Vowles' case" add: "64 L.J., Ch. 414."
 68. Col. i., bottom of page, after "clean water sewers" add: "already spoken of. (See *Kinson v. Poole*, and *Sykes v. Sowerby*, and my comment under 'Water Sewer,' ante, p. 372, and addendum of 1902 thereto.)"
 69. Col. i., after the same word, *delete* from "and these when made by" to "them under section 21" at end of par. I of col. ii.
 70. Col. i., next par., near end, after "empty your drains" add: "(*Kinson's case*)."
 71. Col. i., at end of same par., after "*Dranksome*, 1897" add: "2 Ch. 291. They are here treated as clean (horse-droppings not being considered, *ibid.* 297), and section 16 is said to apply to them (*ibid.* p. 301, line 25), but section 21 does not (*Kinson's case*)."

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72. Col. i., line 9, after "part 3" add: "also, for purposes of getting rid of fecal drainage, all mere slop-sewers."
 73. Col. i., note (b), add: "Since the words in the text and note were written, the case of *Graham v. Wroughton*, 1901, 2 Ch. 451, has decided (Div. Court) that a slop-sewer and a fecal sewer are two different things. The Court of Appeal did not upset this decision. The case rests on *Kinson v. Poole*, 1899, 2 Q.B. 41; in which, on similar grounds of convenience, it was held that people cannot drain fecal sewage or even roof-water into an authority's road drain. It is a mistake to say that these latter are not under Part III. of the Act, and to give this as the ground of the decision in *Kinson's case*. I grant that road drains are clean sewers (in spite of horse-droppings, *Durrant v. Branksome*, 1897, 2 Ch. 291); but it is only *private* clean drains which are taken out of Part III., for they alone can be 'own profit' (*Sykes v. Sowerby*, 1900, 1 Q.B. 585 at pp. 589, 592, 595), and so come within the exception to section 13. Thus, e.g. in *Durrant v. Branksome* (301, line 25), we find that they were under section 16 (otherwise why should a surveyor's report have been needed? See the case). The result, then, is that *Kinson's case* can have decided them to have vested on no ground but convenience, and therefore was precedent for considering convenience in *Graham v. Wroughton*. This last case, however, goes much further, and one finds it hard to reconcile it with *Molloy v. Gray*, 24 L.R. Ir. 258, where the right of a householder to empty fecal sewage into what had been previously only a slop-sewer was passionately vindicated."
 74. Col. i., same note, after "manufactories" read: "but see line ii. on p. 452, 27th July 1901, a note, &c."

75. Col. i., end of note, add: "Fitz. 9 R.P.P.A."

76. Col. i., as to note (d). The addendum 1901 to this (q.v.) has itself been revised.

77. Col. i., end of note (e) (revised by addenda of 1901), after "dry ditch" add: "Nor is custom a defence, *A. G. v. Richmond*, L.R. 2 Eq. 306"; and after inserting from the addendum of 1901, finish the note with a reference to "*R. v. Oxfordshire*, 1 B. & Ad."

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78. Col. i., end of note (i), add: "Right to inspect usually implies right to take copy. Max. 495 b."
 79. Col. i., note (k), after "Harvie's case" add: "fully set out in lecture on 'Duties as to Drains,' p. 473, col. i., 30th August 1902; but note *Hedley v. Webb*."
 80. Col. i., note (m), add: "see p. 475, col. ii., of lecture on 'Duties as to Drains,' 30th August 1902 and *ibid.* note (h) γ."
 81. Col. i., note (o), after the insertion from 1901 addendum, add: "Refer to *Nunn v. Denton*, 14 L.J. C.P. 42, where *agent's* servant slept there. In *Chapman v. R. B. S.* (7 Q.B.D. 185, line 21), the clerk lived next door to bank rent free, but there was separate access and no private communication."
 82. Col. i., note (p), for "must be an authorised" read: "must not be a trespassing."
 83. Col. i., after "destination" *delete* "such a doctrine . . . analogous case."
 84. Col. i., after "(see note r)" add: "and see the text, p. 377, as to legality tests. The acquiescence of the owner at the trial would have put Meader in the right from the date of such acquiescence," and *delete* the "however" which follows.
 85. Col. ii., note (r), *delete* whole note.
 86. Col. ii., note (s), 2nd line of note after "sewer" and before "but an urban authority," insert: "If they wrongly make you pay you can recover. *Ellis v. Bromley*, 53 J.P. 711, and see 'Duties as to Drains,' par. 122. There are four exceptions, i.e. where (i) insufficient drains under the proviso to section 23 (see 'Duties as to Drains,' par. 100); (ii) new streets; (iii) special drainage district, *Bates v. Plumstead*, 64 L.J. M.C. 127; *Newcastle v. Houseman*, 63 J.P. 85; and see section 224 P.H.A.; (iv) Adoptive Statute. As to (ii)."
 87. Col. ii., same note, before "under section 277" insert: "(iii)"; before "also by adopting" insert: "(iv)."

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88. Col. i. and Col. ii., after "Notice" at head of par. *delete* rest of par. and read as follows:
 "This is what will happen. The builder tells the authority that he intends to break into the sewer. Well, if they delay replying, he may after a reasonable pause proceed to do so, since they have 'stood by.' (See 'Duties as to Drains,' 'Exercise of Discretion,' 'Punctuality' note (o) to that lecture.)
 "Suppose, however, that the answer comes

promptly, but tries to delay him in another way by saying that he shall not do so until a specified time (unconscionably long) has elapsed. Does the above doctrine as to unconscionable delay apply? Again, does the doctrine which requires a by-law to be reasonable *à fortiori* say that an unconfirmed, unsifted special requirement as to notice must be reasonable, or are we rather to look to the analogy of other cases which show that a discretion to give special orders (e.g. as to size of drains under section 23) cannot be reviewed simply because it is harshly or absurdly exercised? No; I think the doctrine as to unconscionable delay is hardly in point, for there can be no 'standing by,' since the builder knows from the first what the Council requires. So the doctrine as to reasonableness of by-laws stands on its own historical basis and is inapplicable. (See Comyn Digest 'By-law.') In my opinion, therefore, if the authority specify honestly, though harshly and stupidly, an unduly long notice the builder must wait the undue length of time.

"Now suppose that the Council try a third method of delay—i.e. after having punctually specified a notice (whether reasonable or not) they fail to send their agent and give their orders before the time specified in the notice has elapsed. In such a case the builder can at once break into the sewer, obeying only his sense of what is reasonable and any knowledge he has of what the Council requires, for he has the right to presume that there are no further orders.

"The case of *Graham v. Wroughton*, 1901, 2 Ch. 451, however, shows that the builder must tell the authority that he intends to break into their sewer.

"That case also (arguing by analogy from *ibid.* p. 454, l. 23, &c., shows that when he first pours sewage down a conduit which has previously passed only rain-water he must give notice, wait for orders, and behave generally as if he were actually breaking into a sewer. He must also get the consent of the owners of the clean sewer.

"As to emptying faeces through a conduit which has previously passed only slops the same rule applies (*ibid.*)."

83. Col. ii., after heading ". . . Orders" add: "see subsection as to discretions in Part II. September 1902, of lecture 'Duties as to Drains.' You need not consider whether the sewer is of sufficient size" (I gather this from the contrast to section 61 of the London Sewers Act, 1848).

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90. Col. i., 1st par., at end add: "No appeal to Quarter Sessions. (1862. *Elsdon ex p.* L.R. 9 Q.B.D. 41.)"
91. Col. i., 2nd par., after Council parks add: "57 J.P. 741. See perhaps also *Calder Navign. Co. v. Pilling*, 14 L.J. Ex. 228, Max. 418 a; *Calder v. Hebble*; *Wandsworth*, 8 T.L.R. 279 (contra perhaps *Slattery v. Naylor*, 13 Ap. C. 450, but this principle is certain)."
92. Col. i., next par., after "*Cooper v. Wandsworth*" add: "32 L.J., C.P. 185; 14 C.B. [N.S.] 180, 8 L.T. 278; *Hopkins v. Smethwick*, 1890, 59 L.J. Q.B. 250; 54 J.P. 692; 62 L.T. 783."

93. Col. i., after "*A.G. v. Hooper*" add: "1893, 3 Ch. 483."

94. Col. i., next sentence before "within six months" delete "and expenses."

95. Col. i., after "barred" delete "but by declaring . . . twelve years," and read: "As regards expenses the Council has two remedies immediately the works are done, viz. (i) a personal remedy by summary jurisdiction, or in the County Court, which must be exercised in six months, and (ii) an immediate charge upon the premises exercisable within 12 years (*Hornsey v. Monarch*, 24 Q.B.D. 1). Such a charge is not registrable as a 'land charge' (*R. v. Vice-Reg. ibid.* 178) and has no priority to restrictive covenants (*Tendring v. Downton*, 11 3 Ch. 265). See section 257 P.H.A. and Chitty's Statutes and Lumley *in loco*. They cannot declare the expenses to be private improvement expenses or levy an improvement rate under section 213 (see Lumley). Justices cannot try the reasonableness of the expenses (*Debenham*, 6 Q.B.D. 112). The case of *Tottenham L.B. v. Rowell*, 15 Ch. D. 378, may be referred to, but be it remembered that there the expenses could be declared private improvement expenses. Also (iii) if the illegal connection has damaged the sewer, there will be compensation to pay and the authority could obtain an injunction against future damage."

96. Col. i., three lines lower, after "prescriptive right" add: "Otherwise there is no limitation, properly so called, against this power (*Bermondsey v. Johnson*, L.R. 8 C.P. 44)."

97. Col. ii., line 14, after "Council's sewers" add: "It is not clear whether in *Holland v. Lazarus* the nuisance was in the drain or sewer portion of the conduit. Probably it was round the main-pipe, i.e. at the junction of these two portions."

98. Col. i., end of same par., after "(c)" add: "Implied, Max. 507 (c). See Max. 582 as to private damages. As to breaking up streets the following cases might be of use: *Edgware v. Harrow*, L.R. 10 Q.B. 92; *Hawkins v. Robinson*, 37 J.P. 662; *R. Longton*, 2 E. & E. 651; 29 L.J. M.C. 118 (this last case cannot be taken to contradict the doctrine I have laid down in note (g), p. 452); *Thompson v. Sunderland*, L.R. 3 Ex. D. 429; *Rolls v. St. George*, 14 Ch. D. 788."

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99. Col. i., after heading "How to Produce a Sewer" add: "Here the distinction between slop and faecal sewers does not apply. (*Durrant v. Branksome* in the 1902 addendum to note (b), 8 June 1901, and see **Water Sewers and Slop and Faecal Sewers**" (this last is the heading substituted for 'Sanitary Sewers' by these addenda) same issue, p. 372, col. ii.) A pumping station is not a sewer under section 16, *King's Coll. v. Urbridge*, but otherwise the whole apparatus is included. *Poplar v. K.* (both *ubi supra*)."

100. Col. i., line 4 of same par., after "premises" add: "Or rather the drainage from one set of premises, provided that one found supplies roof-water or sewage and the other supplies sewage (see the second and third pars. of

my addendum to 'Slop Sewers and Fæcal Sewers,' p. 372). My expression 'double sewage' includes the cases thus described."

101. Col. ii., line 6, after "then" add: "(provided some sewage flows)."

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102. Col. i., line 5, "desires to drain," add: "his sink, w.c., or even his roo "
103. Col. i., end of same par., after "property" add: "So also, if our drain carried only our roof-water and Jones wished to foul it."
104. Col. i., line 10 of next par., after "together with Jones" add: "sewage or roof-water."
105. Col. i., end of same par., after "p. 380" add: "See Digest of English Case Law, vol. x, Poor Law 1139, &c."
106. Col. ii., line 6, after "entage" add: "See *Nunn v. Denton*, 14 L.J. C.P. at p. 45, col. i., middle per., Maule, J."
107. Col. ii., end of same par., after "running sewage" add: "or sewage and roof-water respectively."
108. Col. ii., next par., line 5, after Councils delete: "the powers over" and read: "power to carry both" and after "byre" delete "as well as over" and read "and."
- next par., line 5, after "never" add: "until quite abandoned as a conduit for drainage."
109. Col. ii., next lines after "St. Leonard's Vestry" add: "1896, 1 Q.B. 533."
110. Col. ii., six lines lower, after "one house" add: "(This would not make it a 'new building' under section 159, as the opposite process would; nor can I see any way in which it would bring the owner under the P.H.A.A.A., 1890, section 23, subsection 4, even if such Act adopted)."

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111. Col. ii., two-thirds down, take out: "But then . . . improperly . . . helpless" and insert it after: "Prevention . . . cure" at end of par.
112. Col. ii., last par., after "section 15" add: "see (l) i."
113. Col. ii., next line after "surveyor should" add: "though he cannot be forced to."
114. Col. ii., two lines lower, after "landowner" add: "(See *Galloway v. Lord Mayor of London*, L.R. 1, H.L. 34, as to not using compulsory powers for collateral purposes)."

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115. Col. i., after "13" add: "And the surveyor need not distinctly define the route on maps or plans. *Lewis v. Weston-s.-M.*, 40 Ch. D. at p. 62."
116. Col. i., top of next par., after "Mare" add: "(40 Ch. D. 55, and see *Galloway's case*, *ubi supra*, as to 'necessity')."
117. Col. ii., 2nd par., end, after "acting surveyor" add: "(as to disputing his title see *Smith v. Hirst*, 23 L.T. [N.S.] 605)."
118. Col. ii., middle of 4th par., after "Amphlett, B. 335" add: "Max. 130-400."

119. Col. ii., end of same par., after "vaults (m)" add: "The local authority need not take land (of course) *Roderick v. Aston*, 5 Ch. D. 328; *Nth. London R.C. v. M.B.W.*, 28 L.J. Ch. 909 (on *Metropolis M. Act*)."

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120. Col. i., middle after "shall go" add: "*Derby v. Bury*, L.R. 4 Ex. 228 on section 68 of Local Government Act, 1862."
121. Col. i., bottom, after "must purchase it" add: "*Metrop. B.W. v. M.R. Co.*, 4 C.P. 192, but see Max. 505 c."
122. Col. i., last line, after "land" add: "*Roderick v. Aston*."
123. Col. ii., top line, after "referred to" add: "(And see *C. Dudley*, 8 Q.B.D. 86)."
124. Col. ii., next par., after "16," at end of line, add: "see *Lamacraft v. St. Thomas*, 42 L.T. [N.S.] 365."
125. Col. ii., at end of same par. add: "(*Lamacraft v. St. Thomas*). But not under sections 41, 102, or 119, which relate to nuisances, smoke, and bad victuals."
126. Col. ii., next par., 3rd line, after "War Office" add: "Volunteer drill halls are usually vested in the colonel, and therefore not exempt, especially if they are used for other purposes. *U.V.P. St. Margaret's v. Hoskins*, 1899, 2 Q.B. 474; *Pearson v. Holborn*, 1893, 1 Q.B. 389; *Rayner v. Drewitt*, 64 J.P. 567. I may here remark that such buildings are subject to sanitary laws."

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127. Col. i., at end of 2nd par., after "council's sewer" add: "(Max. 186, 188, 189, g; *In re Manor of Lovestoft*, 24 Ch. D. 257. On being acquired by the Crown, property at once becomes sacrosanct, e.g. custom-houses, post-offices, prisons, and other national buildings, if owned by the Crown. This exception does not include War Office or Admiralty property. Property administered by the Attorney-General is not exempted. See *Inhabited House Duty cases* as to 'owner.'"
128. Col. i., bottom of page, after "Crown" add: "unless of course a regular Act is passed, which would mean not compulsion but royal assent."
129. Col. ii., in par. headed "vi. Sanction," when line 10, delete "emptying" and read: "knowingly permitting" (e.g. Max. 143, "Suffering gas washings to be conveyed" includes innocent percolations)."

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130. Col. i., delete all note (b).
131. Col. ii., note (f), after "Harvey" add: "13 T.L.R. 297."
132. Col. ii., end of note (f), add: "The latest case *L.N.W.R. v. Westminster*, 1902, 1 Ch. at 279, sums up decisions, though it deals with other matters."
133. Col. ii., note (g), 3rd line, after "this" add: "Max. 401, line 4, 502 b and c, 505 b."
134. Col. ii., *ibid.*, 5th line after, "rule" add: "Note also P.H.A., section 25, 'shall empty, and maxim

Lex nemo cogit ad impossibilia, and *West Hartlepool*, 1897, W.N. 12 (7), but see last par. but one of addendum to p. 370, col. ii. as to *Private Sewers*."

135. Col. ii. *ibid.*, 7 lines from bottom, after "contemplate such cases" add: "Similar reasoning, *Blashill v. Chambers*, 14 Q.B.D. 487, ll. 24, 25. But see addendum of 31st Aug. 1901, p. 471, col. i., par. 2, no such differentiation under section 22."

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136. Col. i., last line of note (g) should read: "For information as to access to repair see" &c. (ending as before).
 137. Col. ii., note (n), middle, after "p. 24" add: "*Masters v. Pontypool*, L.R. 9 Ch. D. 67."
 138. Col. ii., *ibid.*, end, after "p. 23" add: "And see in *Richards v. Swansea* (9 Ch. D. p. 425, at p. 433), per Brett, L.J., who says that 'a man need not tell his adversary exactly on what grounds he is going to bring himself under the Act.' But I think a public body, or even a person clothed with powers on behalf of others, stands in a very different position."

139. Col. ii., note (r), delete "26" and read "25."

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140. Col. i., at head of 1st par., after "INSUFFICIENT," add a reference to the following: "These remarks do not apply to *uncleansed sewers*. *Baron v. Portslade*, 63 J.P. 726, though I deal with such in addendum to middle of page 470. Perhaps *R. v. Rochester and R. v. Worcester*, both in *Times*, 22nd November 1892, may be of value."

141. Col. ii., end of par. 1, after "help," add: "The complaint must not contain extraneous matter."
 142. Col. ii., next par., middle, after 1899 add: "2 Q.B. 41, 49."

143. Col. ii., end of same par., after (y) add: "The L.G.B. cannot enforce any particular work. *Self v. Hove*, 1895, 1 Q.B. 685."

144. Col. ii., end of next par., add: "and 12 T.L.R. 536."

145. Col. ii., 4th line from end after (s) add a new paragraph: "A fifth good method in certain circumstances is indicated in the second par. of the next addendum 146." Then add another new par.

Discretion as to necessity. In *R. v. L.C.C.* 64 J.P. 20 (1900) the L.C.C. didn't give drainage because they wanted to prevent the houses being used, and therefore they didn't think the drainage "necessary." Held: that they must not say no drainage was necessary for a purpose indicated by Parliament, or that it was an absurd purpose. They have a discretion as to means, not as to whether to carry out end or not.

146. Col. i., end of 2nd par., after "387" add: "And 75 L.T. and 14 T.L.R. 368. *Glossop v. Heston*, 12 Ch. D. 102; *Crosby v. Newmarket*, 1892, A.C. 345; *Robinson v. Workington*, 1877, 1 Q.B. 619; 13 T.L.R. 148; *Jones v. Barking*, 15 T.L.R. 92." Then a new paragraph:

"A fifth good method, if through the negligence of the local authority in not supplying sufficient sewers your premises are flooded with sewage, may be to take an action for damages. *Stretton v. Derby*, 1894, 1 Ch. 431 (but see lecture on 'Duties as to Drains,' 'Nuisance,' par. 122, no damages for misfeasances). So you could sue the authority for not cleansing. *Baron v. Portslade*, 16 T.L.R. 523; and if they illegally compelled you to cleanse their sewer, you could recover damages. *North & Millhouse v. Walthamstow*, 15 T.L.R. 6. See par. 122 just quoted. As to authority's excuse that they did not know of existence of drain see 'Legality Test,' ante, Part I. of this lecture (on Rights), p. 377, col. ii., top."

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147. Col. i., par. 2, 3rd line, after "here also" add: "Is there under section 22 an implied way at all, and is such a way implied through streets only, or through both streets and roads? There is an implied way, or the section would be voided, and that way is through both streets and roads, or we shall be making an unwarranted distinction, as I will show."

148. Col. i., next line, delete "however."

149. Col. i., halfway down par., after "impassable by pipes," delete "they," and read "the boundaries."

150. Col. ii., four lines lower, after "streets" add: "It might be argued that roads were within the purview of section 21 because they were within the purview of section 22, but not, I think, that section 22 did not apply to them because section 21 did not."

151. Col. ii., bottom, after "fount of the sewage" add: "As I may call a bath, wash-basin, sink, &c."

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152. Col. i., third line, delete "district" and read "authority."

153. Col. i., line 10, after "Council" and before "a deadlock" add: "As to such agreements, see *St. Mary v. Hornsey*, 1900, 1 Ch. 595. They are only licenses."

154. Col. i., 3rd par., 3rd line, after "field" add "private sewer."

155. Col. i., *ibid.*, 14th line, after "intervening owners" delete "by" and read: "If a district is unnecessarily troublesome by."

156. Col. i., two lines lower, after "interference" add "by its council."

157. Col. i., next line, after "district" add: "A rural district may have its advantages, as section 25 (Penal Method) will not apply (see lecture on 'Duties as to Drains'). You may find a small change of site within your district useful in order to alter your legal position as to the 100-foot rule under section 25 and section 23 (insufficient drain in urban or rural district. See lecture on 'Duties as to Drains.' This may also enable you to drain into a 'private sewer' (q.v.)."

158. Col. ii., line 11, delete "u" and read "v."

159. Col. ii., after end of par. 1, after "from this" add a new paragraph as follows: "iii. You choose a

private sewer. Are the owner and intervening owners willing? If so, well and good. If you *must* use it under section 25 or section 23, then you can defy these, but not otherwise. I question whether a sewer which you cannot reach because an objector's land intervenes is for you a sewer at all (see *ante*, 'private sewers'), but intervening streets are a different matter. See 'no trespass,' *ante*, and notes (e), (f), and (g) of this lecture on Rights. If your council are not 'entitled to use' it, or if there is any other sewer within 100 feet of your site, or if it is not within 100 feet of your site, or if in any way you are not under section 25 or section 23 (see next lecture, 'Duties as to Drains'), then you cannot defy the sewer-owner or the intervening freeholders of streets, &c. If you can use the private sewer, then you are not under section 21 as to notice orders and regulations, since it is not a sewer of the local authority."

160. Col. i., next par. delete "iii." and read "iv."

161. Col. ii., same par. 5 lines from its end, after "the freehold" and before "(7)," make a new paragraph as A. B. C. D. and E are under head (7).

162. Col. ii., same par. bottom, end, after "double sewage," add: "including sewage and roof-water, one from each set of premises respectively."

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163. Col. i., top of column, write "(7) continued."

164. Col. i., before the par. headed "(8)" make a gap or mark to show that A to E, *ante*, are under head (7).

165. Col. i., third line from bottom of page, delete "(iv.)" and read "(v.)."

166. Col. ii., beginning of par., delete "(v.)" and read "(vi.)."

167. Col. ii., end of same line, for "(iii.)" and "(iv.)" read "(iv.)" and "(v.)."

168. Col. ii., par. after next, delete "donors of" and read "Council which supplies."

169. Col. ii., par. after next, line 2, after "cesspool" add "and private sewer" and delete the "and" before "cesspool."

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170. Col. i., 9 lines from end of note (s), delete: "For all this . . . source of danger to the public."

171. Col. i., at end of same note add a new par.: "Sufficient sewage generally, but not any particular work can be enforced. *Self v. Hore*, 1895, 1 Q.B. 685."

172. Col. i., note (t), 5th line, after "danger" delete all the rest of note and read: "I think the answer (deleted) to the above question is wrong, for it stretches *Molloy v. Gray* too

far (see note (s), *ante*), and it also contradicts the law laid down in my note on measurement of distance and the 100-foot rule at the outset of my discussion on 'the argument from hardship.'"

173. Col. ii., 8 lines from bottom, before "interferes" prefix: "over carefully." Last line but one, after "consent" add: "The exception proves the rule. Analogous reasoning in *Russell*, 13 Ap. C. 425, bottom of par. 1."

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174. Col. ii., note (y), 4th line, after "upon them" add: "Ex p. *Darlington v. Times*, 1870, Nov. 15."

175. Col. ii., note (y), end of note, after "Just held" add: "The merits not considered by a Court which is asked by an authority to upset L.G.B. if the latter act *intra vires*. *R. v. Staines*, 62 L.J., Q.B. 540. The L.G.B. is not a court. Ex p. *Kingstown*, 18 L.R. Ir. 509. If the L.G.B. act partly *ultra* and partly *intra vires*, the good part will, if severable, be severed from the bad and upheld."

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176. As to Addendum to p. 372, col. i., line 12, see that place.

177. As to Addendum to p. 372, col. ii., line 13, delete and refer to that place as now revised.

178. As to Addendum to p. 379 as to (d), insert at beginning: "*Holland v. Lazarus* seems to upset this note and to prove that a drain must, in order to be under section 21, be either of sewage from a building or of roof-water (and see *Fitzgerald*, P.H.A., ed. 1895). References (also) contra, *Sykes v. Sowerby*, *ubi supra*, 591, l. 5 (generally). *R. v. Manchester Waterworks*, 1 B. and C. 630, as to *ejusdem generis*, to which last case oppose *Bound v. Lawrence*, 1892, 1 Q.B. 226, per Fry, J. The reference as to nearest antecedent is *Gostwick's Grammar* 45, as to Coke = Co. Litt. Warranties 385 (b) (contra *Court v. Buckland*), as to Stroud = Stroud's *Judicial Dictionary* not 'Journal.' As to 'same' referring to nearest antecedent, see *Burns, Justices*, 29th ed., vol. iv., 855a, and *R. v. Safran Walden*, 9 Q.B. (= Ad. and El.) 76, quoting *Burns*."

179. As to Addendum to p. 280, "u," for "u" read "v" in both places.

The reader is advised to note all these addenda and those of 1901, or at least to insert the numbers of the addenda (1-175) into their respective places in the text, and to delete where required. It will be advisable to examine the cases since October 1903 for any changes in the law.

